AMERICAN MUSEUM NOVITATES

Published by
Number 1033 THE AMERICAN MUSEUM OF NATURAL HISTORY June 1, 1939
New York City

A NEW GENUS IN THE PHOLCIDAE

BY W. J. GERTSCH

The genus *Spermophora* comprises a small number of six-eyed pholcids which differ from typical species of *Pholcus* only in lacking the anterior median eyes. The name *Spermophora placens* was given to a small Mexican spider with a globose abdomen and relatively short legs by O. P. Cambridge in 1898. A comparison of this species and two close relatives with *Spermophora meridionalis* Hentz, the genotype, shows that they have little in common and that a new generic name is necessary for the group.

PHOLCOPHORINA, NEW GENUS

Carapace suborbicular, convex, the pars cephalica moderately elevated, the eye group occupying less than half of the width of the carapace at that point. Anterior median eyes missing, the other six present and arranged in two triads relatively close together. Eyes of each triad subequal and subcontiguous. Posterior row of eyes distinctly procurved, the medians separated by about their diameter. Anterior lateral eyes (first row) separated by less than their diameter. Sternum slightly broader than long, broadly truncated behind. Coxae subequal in size, incrassated below. Leg formula, 1423, the legs moderately long, without spines. Chelicera of the male with a spur at the base.

GENOTYPE.—*Pholcophorina zeteki*, new species.

This interesting genus belongs in the Blechrosceleae of Simon and presumably in the restricted Blechroscelinae of Petrunkevitch. The slight procurvature of the posterior eye row will separate it from *Pholcus*, *Spermophora*, and *Pholcophora*. The genus *Spermophora* differs from *Pholcus* only in lacking the anterior median eyes. In these genera the ocular triads are very widely separated (see Fig. 3). *Pholcophora*, a genus at present placed in the Pholcinae, exhibits a marked similarity in general facies to *Pholcophorina*, differing chiefly in the straight or slightly recurved posterior row of eyes and in having the anterior median eyes well developed. These genera have other things in common as well, notably the relatively short legs, the incrassated coxae, and the presence in *Pholcophorina zeteki*, new species, of a cheliceral spur similar to that of *Pholcophora texana* Gertsch. In *Systenita*, another genus of six-eyed pholcids, the posterior row of eyes is very strongly procurved and, as in *Spermophora*, the ocular triads are widely separated.

Pholcophorina zeteki, new species

Figures 1–2 and 8–11

FEMALE.—Total length, 1.70 mm.

	Length	Width
CARAPACE	0.62 mm.	0.56 mm.
FRONT	0.30	0.25
STERNUM	0.38	0.42
LABIUM	0.06	0.16
MAXILLA	0.17	0.11
ABDOMEN	1.10	1.80

Integument of the carapace light yellow, very lightly infuscated, essentially unclothed but with a row of marginal hairs and a few erect ones on the midline. Triads of eyes on a black field. Appendages concolorous with the carapace, set with rows of inconspicuous black hairs. Underside of the carapace colored as the dorsum, lightly infuscated, the sternum with a sparse covering of erect black hairs. Abdomen bluish gray, set with rather coarse black hairs.

Carapace suborbicular, rather evenly rounded except for the lower, protruding clypeus, the pars cephalica elevated and more convex than the pars thoracica, the median groove longitudinal, inconspicuous. Carapace as seen from the side essentially equal in height throughout the length, gently rounded, the highest point between the second coxae. Clypeus subvertical just below the eyes but inclined forward at the distal end, the height 0.23 mm., twice the length of an ocular triad. Eyes six, in two triads, the anterior medians lacking. Eyes subequal in size, the anterior laterals separated from each other by five-eighths their diameter. Posterior row of eyes in a weakly but distinctly procurved line, the oval medians set obliquely, separated in front by their long diameter. Eyes of each

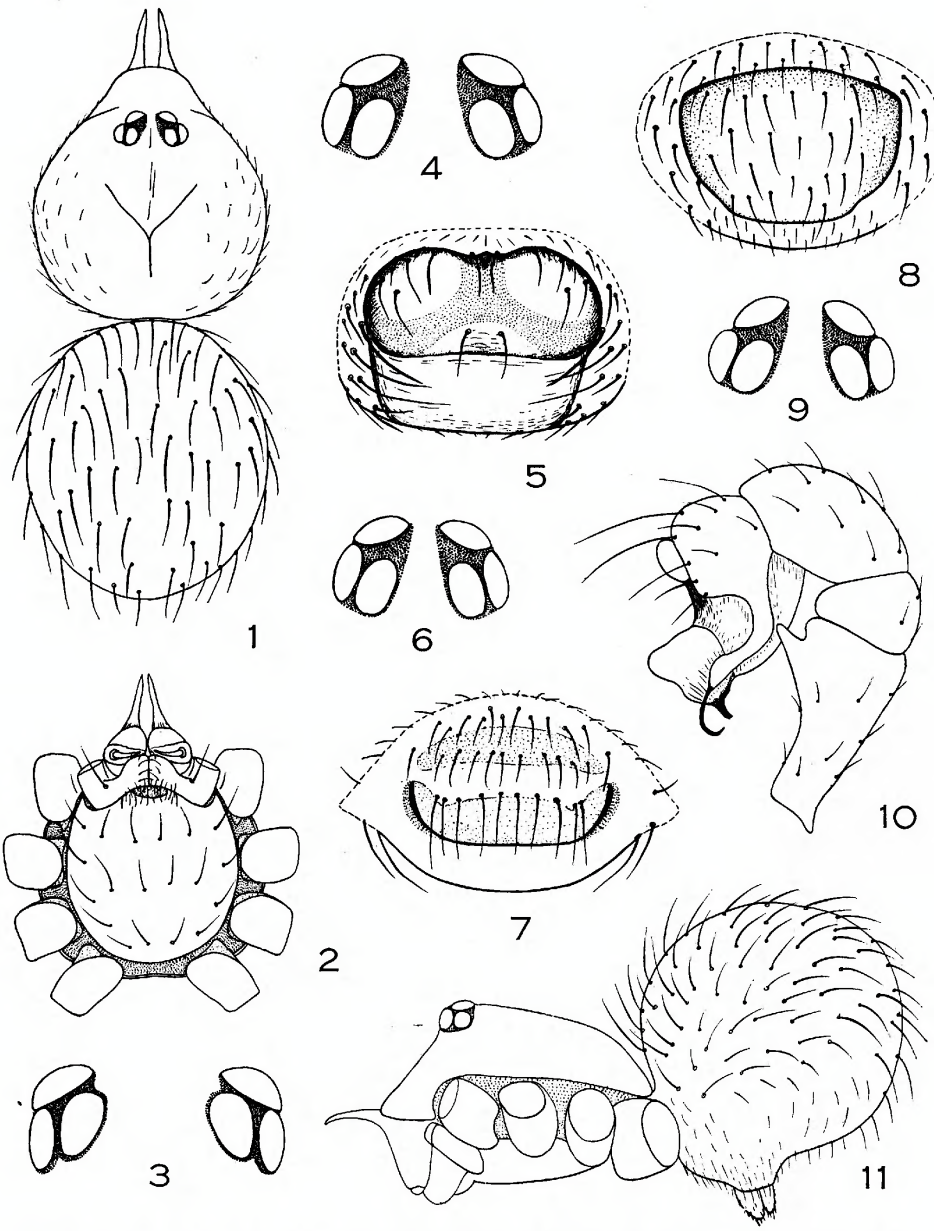

Fig. 1. *Pholcophorina zeteki*, new species, dorsal view of male, appendages omitted.
Fig. 2. Idem, ventral view of carapace of male.
Fig. 3. *Spermophora meridionalis* Hentz, eyes of male.
Fig. 4. *Pholcophorina placens* (Cambridge), eyes of female, dorsal view.
Fig. 5. Idem, epigynum of female.
Fig. 6. *Pholcophorina davisi*, new species, eyes of female, dorsal view.
Fig. 7. Idem, epigynum of female.
Fig. 8. *Pholcophorina zeteki*, new species, epigynum of female.
Fig. 9. Idem, eyes of female, dorsal view.
Fig. 10. Idem, palpus of male, retrolateral view.
Fig. 11. Idem, lateral view of male, appendages omitted.

triad subcontiguous. Arrangement of eyes as illustrated in figure 9. Sternum oval, slightly broader than long, subtruncated in front and behind, the posterior coxae separated by their length. Coxae subequal in size, all of them with a bulbous incrassation on the ventral aspect.

Leg formula, 1423, the legs without true spines. Fourth femur curved.

	I	II
Femur	1.06 mm.	0.84 mm.
Patella	0.20	0.20
Tibia	1.08	0.75
Metatarsus	1.20	0.92
Tarsus	0.44	0.34
Total	3.98	3.05

	III	IV
Femur	0.75 mm.	1.11 mm.
Patella	0.19	1.20
Tibia	0.58	0.05
Metatarsus	0.86	1.07
Tarsus	0.32	0.37
Total	2.70	3.80

Abdomen oval, somewhat longer than broad, higher than broad, projecting far behind the spinnerets which are near the base of the venter. Epigynum a broad, elevated plate as illustrated in figure 8.

Male.—Total length, 1.30 mm.

	Length	Width
Carapace	0.60 mm.	0.55 mm.
Front	0.35	0.25
Sternum	0.36	0.42
Labium	0.07	0.15
Maxilla	0.15	0.10
Abdomen	0.70	0.50

Integument brighter yellow than in the female. Structure of the carapace as illustrated in figures 1 and 11, in essential agreement with the female. Eyes arranged as in the female, the anterior lateral eyes slightly larger than the others. Clypeus, 0.20 mm. high, slightly more than twice the length of an ocular triad. Sternum broader than long, truncated in front and behind, the posterior coxae separated by their length. Details of the underside of the carapace as in figure 2. Chelicera armed with a slender spur at the base as shown in the figures. Palpus as illustrated in figure 10, the structure essentially as in species of *Pholcophora*. Femur of the palpus with a short ventral spur near the end. Tarsus with a curved process which ends in a black hook. Abdomen as in the female, clothed with coarse black hairs.

Type Locality.—Male holotype and female allotype from Barro Colorado Island, Canal Zone, February 10, 1936 (Gertsch), in the collection of The American Museum of Natural History.

This tiny species has considerable resemblance to *Pholcophora texana* Gertsch but is distinct in the procurved eyes of the posterior row, in lacking anterior median eyes and in the details of the palpus. This is presumably the same species recorded from Barro Colorado Island as *Spermophora placens* Cambridge by Chickering in 1936 (Trans. American Microscopical Soc., LV, p. 452).

Pholcophorina placens (O. P. Cambridge)

Figures 4 and 5

Spermophora placens O. P. Cambridge, 1896, Biologia Centrali-Americana, Araneidea, I, p. 222, Pl. xxvii, fig. 10.—F. Cambridge, 1902, idem, II, p. 370, Pl. xxxv, fig. 4.

Female.—Total length, 1.80 mm.

	Length	Width
Carapace	0.80 mm.	0.80 mm.
Front	0.42	0.32
Sternum	0.53	0.56
Labium	0.08	0.20
Maxilla	0.23	0.13
Abdomen	1.10	0.75

Coloration and clothing of whole spider in close agreement with *zeteki*.

Carapace suborbicular, moderately convex, the pars cephalica subtriangular, elevated, the well-marked median groove longitudinal, the cephalic sutures well indicated. Clypeus protruding, twice as long as the length of an ocular triad. Eyes six, in two triads. Anterior lateral eyes separated from each other by one diameter. Posterior row of eyes slightly procurved, the medians oval, separated by slightly more than their long diameter (9.5/11), subcontiguous with the subequal laterals. Eye arrangement as illustrated in figure 4. Sternum suborbicular, subtruncated in front, rounded between the posterior coxae which are separated by their width. Coxae with a bulbous incrassation as in *zeteki*.

Leg formula, 1423, the legs without spines but set with rows of hairs. Fourth coxae curved.

	I	II
Femur	1.75 mm.	1.38 mm.
Patella	0.32	0.29
Tibia	1.90	1.25
Metatarsus	2.17	1.55
Tarsus	0.65	0.50
Total	6.79	4.97

	III	IV
Femur	1.30 mm.	1.72 mm.
Patella	0.29	0.32
Tibia	1.16	1.66
Metatarsus	1.52	1.80
Tarsus	0.47	0.47
Total	4.74	5.97

Abdomen subglobose, essentially as in *zeteki*. Epigynum as illustrated in figure 5, an elevated tubercle.

Record.—Potrero, Mexico, June 24, 1936, one female (L. Irby Davis).

The species diagnosed above seems to conform fully to the description of *Spermophora placens* as given by O. P. Cambridge. The ocular triads are more widely separated than in *davisi* or *zeteki*, new species, and the first metatarsus is somewhat longer than the tibia.

Pholcophorina davisi, new species

Figures 6 and 7

Female.—Total length, 1.70 mm.

	Length	Width
Carapace	0.80 mm.	0.72 mm.
Front	0.30	0.25
Sternum	0.50	0.52
Labium	0.06	0.16
Maxilla	0.20	0.13
Abdomen	0.90	0.80

Coloration and structure of the spider in nearly complete agreement with *placens*, differing in the following respects. Carapace somewhat longer than broad. Eyes six, in triads which are less widely separated, the oval anterior laterals separated by about two-thirds the short diameter, the posterior median eyes set obliquely, separated in front by their diameter from the subequal laterals. Details of the eye arrangement as illustrated in figure 6. Median groove and cephalic striae less well marked than in *placens*.

Legs without true spines, relatively shorter than in *placens*, the first and fourth tibiae equal in length to these metatarsi, the first femur less than twice as long as the carapace.

	I	II
Femur	1.50 mm.	1.20 mm.
Patella	0.30	0.26
Tibia	1.60	1.10
Metatarsus	1.60	1.30
Tarsus	0.50	0.40
Total	5.50	4.26

	III	IV
Femur	1.10 mm.	1.53 mm.
Patella	0.25	0.29
Tibia	1.00	1.50
Metatarsus	1.20	1.50
Tarsus	0.35	0.40
Total	3.90	5.22

Abdomen clothed as in the other species with coarse black hairs. Epigynum as illustrated in figure 7.

Type Locality.—Female holotype from sixty-two miles north of Acapulco, Mexico, June 18, 1936 (A. M. and L. I. Davis), in the collection of The American Museum of Natural History.

Pholcophorina banksi, new name

Spermophora placens Banks, 1931, Meddelelser fra det Zoologiske Museum, Oslo, No. 22, p. 273, Pl. II, figs. 3 and 6. (Not *Spermophora placens* Cambridge.)

A new name is proposed above for the six-eyed spider from Floreana, Galapagos Island, which was referred to *Spermophora placens* Cambridge by Dr. Nathan Banks in 1931. The figures and the description of the eyes lead me to believe that the species, known only from a male in the Oslo Museum, belongs in *Pholcophorina*.